



National Weather Service

Storm Data and Unusual Weather Phenomena



March 1997

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

CONNECTICUT, Northeast

CTZ002>004	Hartford - Tolland - Windham	06	0800EST 1800EST		0	0			Strong Winds
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CTZ002-004	Hartford - Windham	06	1300EST 1700EST		0	0			High Wind (G65)
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High winds with gusts reaching 50 to 76 mph from the west and northwest occurred across the state in the wake of a strong low pressure system that passed through New England and into the Gulf of Maine. Wind speeds increased dramatically around mid-morning and the strongest winds occurred during the afternoon. Buildings and vehicles were damaged by falling trees and tree limbs in many communities throughout the state. Some roads were blocked by fallen trees and limbs. Up to 60,000 electric customers lost power statewide, but most of the power was restored within 12 hours. A peak gust to 76 mph was reported from Plainfield in Windham County at 3:01 PM. Other peak gusts included: 65 mph at Burlington; 53 mph at Bradley International Airport in Windsor Locks in Hartford County; and 48 mph at Willimantic in Windham County.

CTZ002>003	Hartford - Tolland	14 15	0800EST 0000EST		0	0			Ice Storm
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Snow changed to freezing rain and ice accretions of 1/4 to 1/2 inch were reported in parts of northern Connecticut. In the higher elevations outside the Connecticut River Valley, such as Suffield, ice accretion up to 1 inch was reported. Some roads were closed due to fallen tree limbs and scattered power outages were reported.

CTZ002>004	Hartford - Tolland - Windham	31	1400EST 2359EST		0	0			Strong Winds
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CTZ002>004	Hartford - Tolland - Windham	31	1500EST 2359EST		0	0			Heavy Snow
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A low pressure system formed off the New Jersey coast during the early morning hours and intensified rapidly as it moved to a position 60 miles south of Newport, Rhode Island by early evening. Pressure falls of 14 millibars occurred during a 12 hour period. The system then retreated to the south during the evening.

Precipitation began mostly as rain during the morning of March 31st. It began mixing with and finally changing to all heavy, wet snow during the afternoon. Snow began accumulating rapidly, especially in the higher elevations. Blizzard conditions developed by late afternoon and evening as northeast winds increased and gusted to 30 to 40 mph.

Numerous power outages began to occur by evening as the weight of the wet snow brought tree limbs and wires crashing down. Snow accumulations of more than one foot were reported by midnight, especially in the higher elevations, with 6 to 12 inches elsewhere.

The final report on this storm will be included in April 1997 Storm Data



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MASSACHUSETTS, Central and East

MAZ002>024 **Western Franklin - Eastern Franklin - Northern Worcester - Western Middlesex - Western Essex - Eastern Essex - Western Hampshire - Western Hampden - Eastern Hampshire - Eastern Hampden - Southern Worcester - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth - Eastern Plymouth - Southern Bristol - Southern Plymouth - Barnstable - Dukes - Nantucket**

06	0800EST 1800EST	0	0			Strong Winds
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MAZ012-015>016-020-020-022-024 **Southern Worcester - Suffolk - Eastern Norfolk - Southern Bristol - Barnstable - Nantucket**

06	1300EST 1800EST	0	0	80.0K	High Wind (G67)
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Worcester, MA

High winds with gusts reaching 50 to 77 mph from the west and northwest occurred across Massachusetts in the wake of a strong low pressure system that passed through New England and into the Gulf of Maine. Wind speeds increased dramatically around mid-morning. Part of a roof was blown off a building in the Dorchester section of Boston. A windmill used to generate electricity at Hull High School in Hull was seriously damaged when all three arms crashed to the ground at 2:25 PM. Luckily, school had been dismissed. Numerous trees, tree limbs, and power lines were blown down, resulting in power outages affecting up to 25,000 electric customers, but most had power restored within 12 hours. An empty tractor-trailer truck was blown over while traveling on a road in Westfield. A number of houses and autos sustained damage from falling trees and tree limbs. No injuries were reported.

A peak wind gust to 77 mph at Blue Hill Observatory in Milton was the highest wind gust recorded there since January, 1996, when a peak gust of 91 mph was recorded. That gust was erroneously reported as a much lower value in the Storm Data publication for that month.

Other peak wind gusts included: Worcester, 72 mph; Nantucket, 69 mph; Hyannis, 64 mph; New Bedford, 63 mph; Falmouth, 61 mph; Brewster, 60 mph; Winthrop, 58 mph; and Boston Logan International Airport, 55 mph. Peak wind gusts of 45 to 55 mph generally were reported throughout the rest of the state, including 50 mph in downtown Springfield

Hampden County Agawam

10	0500EST	0	0	5K	Lightning
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A bolt of lightning struck a house in Agawam during a snowstorm and resulted in an estimated \$5,000 damage

MAZ022

Barnstable

12	1600EST 2100EST	0	0		High Wind (G50)
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A period of high winds affected southeastern Massachusetts, including Cape Cod and the Islands during the late afternoon and early evening. A peak gust to 58 mph was reported from Falmouth.

MAZ021

Southern Plymouth

14	0200EST 0400EST	0	0		High Wind (G58)
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A weather spotter reported a peak wind gust to 67 mph during the early morning hours.

MAZ002>012

Western Franklin - Eastern Franklin - Northern Worcester - Western Middlesex - Western Essex - Eastern Essex - Western Hampshire - Western Hampden - Eastern Hampshire - Eastern Hampden - Southern Worcester

14	0800EST 2300EST	0	0		Snow/Ice
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Several inches of snow accumulated before precipitation changed to light freezing rain. The maximum snowfall reported was 5 inches in Greenfield. Glaze accretion was generally minor with thicknesses of a few tenths of an inch. There were a few reports of scattered, brief power outages.



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MASSACHUSETTS, Central and East

MAZ020>024 **Southern Bristol - Southern Plymouth - Barnstable - Dukes - Nantucket**
26 **0000EST** **0** **0** **Strong Winds**
 1000EST

MAZ022 **Barnstable**
26 **0500EST** **0** **0** **High Wind (G54)**
 0800EST

A strong south to southwest wind flow ahead of an approaching cold front brought sustained winds of 30 to 40 mph with gusts to 50 to 55 mph along coastal sections of Cape Cod and the Islands to the Rhode Island border. The peak high wind gusts were 63 mph, reported from both Falmouth and Chatham between 5 AM and 6 AM. A few claps of thunder were heard and scattered power outages were reported.

Barnstable County
Dennis **29** **1400EST** **0** **0** **Heavy Rain**
 2300EST

Bristol County
Fairhaven to **29** **1400EST** **0** **0** **Heavy Rain**
Southern Half **2300EST**

Plymouth County
Wareham **29** **1400EST** **0** **0** **Heavy Rain**
 2300EST

Heavy rain accompanied thunderstorms which produced vivid lightning over southeastern Massachusetts, including Cape Cod. Rainfall totals ranged from 1 to 3 inches, with a maximum of 3.5 inches in East Dennis and Onset. Fairhaven reported a total of 2.58 inches. All of the rain occurred within a 12 hour period.

MAZ002>021 **Western Franklin - Eastern Franklin - Northern Worcester - Western Middlesex - Western Essex - Eastern Essex - Western Hampshire - Western Hampden - Eastern Hampshire - Eastern Hampden - Southern Worcester - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth - Eastern Plymouth - Southern Bristol - Southern Plymouth**
31 **1400EST** **0** **0** **Heavy Snow**
 2359EST

MAZ002>024 **Western Franklin - Eastern Franklin - Northern Worcester - Western Middlesex - Western Essex - Eastern Essex - Western Hampshire - Western Hampden - Eastern Hampshire - Eastern Hampden - Southern Worcester - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth - Eastern Plymouth - Southern Bristol - Southern Plymouth - Barnstable - Dukes - Nantucket**
31 **1500EST** **0** **0** **Strong Winds**
 2359EST

MAZ016>017-019-021 **Eastern Norfolk - Northern Bristol - Eastern Plymouth - Southern Plymouth**
31 **1700EST** **0** **0** **High Wind (G63)**
 2200EST

Blue Hill Observatory, Milton, MA

A low pressure system formed off the New Jersey coast during the early morning hours and intensified rapidly as it moved to a position 60 miles south of Newport, Rhode Island by early evening. Pressure falls of 14 millibars occurred during a 12 hour period. The system then retreated to the south during the evening. This storm went on to produce one of the greatest snowfalls ever recorded in central and eastern Massachusetts and was termed the "Blizzard of '97." The storm was made even more unusual by its late-season occurrence. The final snowfall totals will be included in April 1997 Storm Data, as will the final assessment of damages caused by the heavy wet snow and strong winds.

Precipitation started in the form of rain and began spreading across the state from south to north during the morning hours, but soon mixed with heavy, wet snow. Rain changed to all snow rather quickly by late morning across western and central Massachusetts and soon changed to all snow in the eastern part of the state, except right along the coast, during the afternoon. During the evening hours, moderate to heavy rain soon changed to heavy, wet snow even along the coast. Blizzard conditions, which began during the afternoon across western and central Massachusetts, spread southeast covering most of the state by midnight, except over Cape Cod and the Islands and along the immediate south coastal areas and islands where snow was still mixed with some rain. Thunder and lightning began during the late afternoon and continued intermittently throughout the night.

Northeast winds increased to strong to gale force throughout the eastern part of the state by late afternoon and high winds occurred during the evening, especially along coastal sections. The strong winds with this storm occurred during the late afternoon and



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MASSACHUSETTS, Central and East

evening hours. A peak gust to 73 mph from the northeast was recorded at Blue Hill in Milton at 6:43 PM. At Easton, in Bristol County, a gust to 60 mph was recorded at 9:30 PM. Along the coast south of Boston, Hull had a gust to 64 mph. Along Buzzards Bay, Onset recorded a peak gust to 64 mph. All of the wind gusts were from the northeast and occurred in the late afternoon and early evening, when the lowest barometric pressure was recorded.

Heavy, wet snow accumulated rapidly on all surfaces, including trees and power lines, during the late afternoon. The evening commute became a nightmare as thousands of cars backed up on unplowed roads. The situation was further aggravated by falling trees and power lines, which closed some roads. Power failures began occurring by late afternoon and during the evening, the total number of outages soared rapidly into the hundreds of thousands. Immediate coastal areas had the least losses of power. In the City of Boston, 50 to 60 percent of the snowplows which were on the streets by 11 PM were later rendered useless because of the heavy, wet snow as the storm raged into April 1st.

Some snowfall accumulations as of midnight on April 1st were as follows: Ashfield, 25 inches; Worcester Airport, 21.7 inches; West Townsend, 15.9 inches; Blue Hill, Milton, 15 inches; Woburn, 12 inches; and Hingham, 6 inches. Again, refer to April 1997 Storm Data for further details.

NEW HAMPSHIRE, Southern

NHZ011>012

Cheshire - Hillsborough

06	0900EST 1900EST	0	0	Strong Winds
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Strong winds with gusts reaching 45 to 50 mph from the west and northwest occurred in the wake of a strong low pressure system that passed through New England and into the Gulf of Maine. Trees and limbs brought down power lines throughout the area and up to a total of 15,000 electric customers lost power statewide. Peak gusts up to 50 mph were reported in the Nashua area.

NHZ011

Cheshire

14	0900EST 2100EST	0	0	Heavy Snow
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Snow accumulations of 3 to 6 inches were reported before precipitation changed to sleet and freezing rain. An isolated maximum amount of 7 inches was reported at Westmoreland in far southwest New Hampshire.

NHZ011>012

Cheshire - Hillsborough

31	1500EST 2359EST	0	0	Heavy Snow
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NHZ011>012

Cheshire - Hillsborough

31	1600EST 2359EST	0	0	Strong Winds
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A low pressure system formed off the New Jersey coast during the early morning hours and intensified rapidly as it moved to a position 60 miles south of Newport, Rhode Island by early evening. Pressure falls of 14 millibars occurred during a 12 hour period. The system then retreated to the south during the evening.

Precipitation began mostly as rain during the morning of March 31st. It began mixing with and then finally changing to all heavy, wet snow during the afternoon.

Snow began accumulating rapidly, especially in the higher elevations. Blizzard conditions developed by late afternoon and evening, as northeast winds increased and gusted to 30 to 40 mph. Numerous power outages began to occur by evening as the weight of the wet snow brought tree limbs and wires crashing down.

Snow accumulations of more than one foot, including 17 inches at Jaffrey, were reported by midnight in the higher elevations, with 6 to 12 inches elsewhere.

The final effects of this storm will be reported in April 1997 Storm Data.



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RHODE ISLAND

RIZ001>007 Northwest Providence - Southeast Providence - Western Kent - Eastern Kent - Bristol - Washington - Newport
06 0800EST 0 0 Strong Winds
1800EST

RIZ002-007 Southeast Providence - Newport
06 1200EST 0 0 High Wind (G54)
1800EST

High winds, with gusts reaching 50 to 62 mph from the west and northwest, occurred across the state in the wake of strong low pressure that passed through New England and into the Gulf of Maine. Wind speeds increased dramatically around mid-morning and the strongest winds occurred during the afternoon.

Buildings and vehicles were damaged by falling trees and tree limbs in many communities throughout the state. In Burrillville and Glocester, houses were damaged by falling trees and in Chepachet, a parked car was set afire by a falling power line. Part of a roof was blown off a school in Providence. Up to 11,800 electric customers were without power during the afternoon, but only a couple of thousand remained without power by early evening. A peak gust to 62 mph was reported from downtown Providence around mid-afternoon. Some peak gusts reported around the state included: Little Compton, 58 mph; Coventry, 57 mph; Block Island, 55 mph; and Woonsocket, 52 mph.

RIZ002>007 Southeast Providence - Western Kent - Eastern Kent - Bristol - Washington - Newport
26 0000EST 0 0 Strong Winds
1000EST

A strong south to southwest wind flow ahead of an approaching cold front brought sustained winds of 30 to 40 mph with gusts to 50 to 60 mph along coastal sections and as far north as Providence in the eastern portion of the state. Some peak wind gusts included: Newport, 55 mph; downtown Providence, 53 mph; and Cranston and West Warwick, both 51 mph. There were no reports of damage.

RIZ001>007 Northwest Providence - Southeast Providence - Western Kent - Eastern Kent - Bristol - Washington - Newport
31 1400EST 0 0 Heavy Snow
2359EST

RIZ001>007 Northwest Providence - Southeast Providence - Western Kent - Eastern Kent - Bristol - Washington - Newport
31 1500EST 0 0 Strong Winds
2359EST

RIZ007 Newport
31 1800EST 0 0 High Wind (G61)
2100EST

A low pressure system formed off the New Jersey coast during the early morning hours and intensified rapidly as it moved to a position 60 miles south of Newport, Rhode Island by early evening. Pressure falls of 14 millibars occurred during a 12 hour period. The system then retreated to the south during the evening.

Precipitation began occurring from south to north across the state during the morning and began mixing and changing to heavy, wet snow in the northwest portion of the state by late morning and during the afternoon. Over the remainder of the state, rain became mixed with snow during the afternoon and had changed to all snow over most of the state, with the exception of the south coast, by midnight.

Increasing northeast winds during the afternoon became strong to gale force with gusts to 30 to 40 mph inland and up to 60 to 70 mph along the south coast. A peak gust to 71 mph from the northeast was recorded at Little Compton during the early evening. The strongest winds with this storm occurred during the late afternoon to early evening, during the time of lowest barometric pressure.

The weight of the heavy, wet snow began knocking down tree limbs and power lines and widespread power outages began occurring during the late afternoon and evening across much of the state, except the area from Providence south and southwestward where there were only scattered outages. Highway travel was just about impossible during the evening due to the prevailing blizzard conditions. Snowfall totals by midnight exceeded one foot in northern Rhode Island, with 15 inches at North Foster and 14 inches at Woonsocket.

A complete report of this storm will be included in April 1997 Storm Data.